California Postsecondary Education Commission

Improving Teacher Quality State Grants Program

Project Description

Project Title	Strategic Alliance of Robla/UC-Davis/Sacramento County Office of Ed.		
Grant Amount: $ 260,617		Grant Period: Oct. 1, 2007 - Sept. 30, 2011	
Grade Level: K-2		Subject Matter: Mathematics	
Institute of Higher Education	❑ University of California-Davis		
Local Education Agency	❑ Robla School District		
Additional Partners:	❑ Sacramento County Office of Education		
Need for Project/ Population To Be Served:	Several schools in the district recently emerged from the IIUSP program and they are no longer eligible for the support they received from that program. The teachers feel that they made great gains as a result of their participation and worry that without continued support they may slip back. Professional development in Robla has been focused on language arts and teachers are eager to turn their attention to mathematics to better understand how children's thinking develops in that domain and to consider ways to use mathematics as a vehicle for promoting language and literacy development.		
Project Goals:	Project goals • promote the development of children's conceptual understanding of mathematics including their concept of number, their ability to write and solve word problems, and their knowledge of shape classification. • promote children's English language and literacy development through writing problems and discussing strategies. • promote the development of teachers' pedagogical content knowledge (Shulman, 1986) in particular their knowledge of how children's strategies in mathematics develop. • promote teachers' abilities to engage children in discussions of their mathematical thinking.		
Summary of Activities:	In monthly meetings teachers will analyze videos of interviews to better understand the development of children's mathematical thinking and ways in which they can support children's strategy development through discussion. Aliance members collaboratively design and revise multiple-entry math problems and activities based on analysis of children strategies. Allinace members learn about strategy change as an overarching theory of children's cognitive development. In their classrooms, teachers will conduct problem solving interviews with their students with support from project staff. They will engage their students in multiple-entry problems and activities and orchestrate discussion of children's strategies and collect student work to bring back to meetings for discussion.		
Outcomes Expected:	Children in Strategic Alliance classrooms will have greater number knowledge, more sophisticated solution strategies and better understanding of shape classification than children in control classooms. Children in Strategic Allinace classrooms will be more capable of explaining their strategies and discussing mathematical ideas than children in control classrooms. Teachers will develop knowledge of children's strategy development and develop skills in supporting children in solving problems and discussing their strategies.		
Teachers Served	26	Students Served	162

Project Website:

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